APPENDIX E
CLEAN WATER ACT SECTION 404 COMPLIANCE

1. Section 404 Joint Permit Application to Oregon Department of State Lands and Army Corps of Engineers

2. Department of State Lands Permit No. 31439-RF

US Army Corps of Engineers
Portland District

JOINT PERMIT APPLICATION FORM

THIS APPLICATION WILL MEET THE REQUIREMENTS OF BOTH AGENCIES

AGENCIES WILL ASSIGN NUMBERS

Corps Action ID Number _____ Oregon Division of State Lands Number 31439-RF

SEND ONE SIGNED COPY OF YOUR APPLICATION TO EACH AGENCY

District Engineer
ATTN: CENWP-OP-GP
P.O. Box 2946
Portland, OR 97208-2946
503-808-4373

State of Oregon
Division of State Lands
775 Summer Street N.E.
Salem, OR 97310
503-378-3805

1. APPLICANT NAME: Pacific Trend Building Co., Attn: Lou Mahar
Address: 1014 N. Riverside Avenue, Medford, OR 97504
Business Phone #: (541) 772-3378
Home Phone #: n/a
FAX #: (541) 772-7439

[ ] Co-Applicant [ ] Authorized Agent [X] Contractor

Name: Terra Science, Inc./Attn: Greg Swenson
Address: Post Office Box 2100, Portland, OR 97208-2100
Business Phone #: (503) 274-2100
Home Phone #: n/a
FAX #: (503) 274-2101

Property Owner *(if different than applicant)*
Name: Same as applicant
Address:
Business Phone #:
Home Phone #:
FAX #:

2. PROJECT LOCATION

Street, road or other descriptive location: East of North Phoenix Rd., north of Coal Mine Rd., and south of Harbrooke Rd.

Legal Description: Quarter: SW 1/4,NW 1/4; Section: 34 BC; Township: T. 37 [ ] North [X] South; Range: R. 01 [ ] East [X] West

In or Near (City or Town) Medford County Jackson Tax Maps # 37-1W-34 Tax Lots # North part of 2000

Waterway Larson Creek Wetland River Mile 2 Latitude 42 deg. 18' 50" Longitude 122 deg. 48' 53"

Is consent to enter property granted to the Corps and the Division of State Lands? [X] Yes [ ] No

3. PROPOSED PROJECT INFORMATION

Activity Type: [X] Fill [X] Excavation (removal) [ ] In-Water Structure [ ] Maintain/Repair an Existing Structure

Brief Description: Construction of Stonegate Estates, Phase 1 and an irrigation canal siphon under Larson Creek.

Fill will involve n/a cubic yards annually and/or 20000 cubic yards for the total project
120 cubic yards in a wetland or below the ordinary high water or high tide line

Fill will be: [X] Riprap [ ] Rock [X] Gravel [X] Sand [X] Silt [X] Clay [ ] Organics [ ] Other _____

Fill Impact Area is 0.03 Acres; 110 ft. total length; 10 ft. avg. width; 3 ft. avg. depth

Removal will involve N/A cubic yards annually and/or 120 Cubic yards for the total project
120 cubic yards below the ordinary high water or high tide line

Removal will be: [ ] Riprap [ ] Rock [ ] Gravel [ ] Sand [ ] Silt [ ] Clay [ ] Organics [ ] Other _____

Removal Impact Area is _____ Acres; _____ length; _____ width; _____ depth

Is the Disposal area: Upland? [X] Yes [ ] No Wetland/Waterway? [ ] Yes [X] No

	Yes	No
Are you aware of any Endangered Species on the project site?		X
Are you aware of any Cultural Resources on the project site?		X
Is the project site near a Wild and Scenic River?		X

If Yes, please explain in the project description (on page 2, block 4).

4. PROPOSED PROJECT PURPOSE AND DESCRIPTION

Project Purpose and Need:

See attached permit text.

Project Description:

See attached permit text.

List of figures: 1) Vicinity; 2) Existing Conditions & Site Topography; 3) Proposed Development & Waters Impacts; 4) Proposed Siphon Detail (North); 5) Proposed Siphon Detail (South); 6) Proposed Storm Water Management Plan; 7A) Pollution Control Manhole Detail; 7B) Proposed Biofiltration Swale Cross-Section.

How many project drawing sheets are included with this application? 8

NOTE: A complete application must include drawings and a location map submitted on separate 8-1/2 x 11 sheets.

Will any material, construction debris, runoff, etc. enter a wetland or waterway? [X] Yes [ ] No

If yes, describe the type of discharge (above) and show the discharge location on the site plan.
See attached permit text.

Estimated Start Date June 2004 Estimated Completion Date September 2004

5. PROJECT IMPACTS AND ALTERNATIVES

Describe alternative sites and project designs that were considered to avoid impacts to the waterway or wetland.

See attached permit text.

Describe what measures you will use (before and after construction) to minimize impacts to the waterway or wetland.

See attached permit text.

NOTE: If necessary, use additional sheets.

6. ADDITIONAL INFORMATION

Adjoining Property Owners and Their Addresses and Phone Numbers.

Has the proposed activity or any related activity received the attention of the Corps of Engineers or the State of Oregon in the past, e.g., wetland delineation, violation, permit, lease request, etc.? [X] Yes [ ] No

If yes, what identification number(s) were assigned by the respective agencies?

Corps # _____ State of Oregon # Det. No. 00-0548

7. CITY/COUNTY PLANNING DEPARTMENT AFFIDAVIT (to be completed by local planning official)

☐ This project is not regulated by the local comprehensive plan and zoning ordinance.

☐ This project has been reviewed and is consistent with the local comprehensive plan and zoning ordinance.

☐ This project has been reviewed and is not consistent with the local comprehensive plan and zoning ordinance.

☒ Consistency of this project with the local planning ordinance cannot be determined until the following local approval(s) are obtained:

☒ Conditional Use Approval – For Riparian Corridor projects (i.e. syphon)
☐ Development Permit
☐ Plan Amendment
☐ Zone Change
☒ Other Preliminary PUD Plan revision / land division revision

An application ☐ has ☒ has not been made for local approvals checked above.

Suzanne K. Myers	Associate Planner	Medford	12-9-03
Signature (of local planning official)	Title	City/County	Date

541-774-2387

8. COASTAL ZONE CERTIFICATION

If the proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. A public notice will be issued with the certification statement which will be forwarded to the Oregon Department of Land Conservation and Development (DLCD) for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program, contact the department at 1175 Court Street N.E., Salem, Oregon 97310 or call 503-373-0050.

Certification Statement

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

n/a	n/a
Print/Type Name	Title
n/a	n/a
Applicant Signature	Date

9. SIGNATURE FOR JOINT APPLICATION (REQUIRED)

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete, and accurate. I further certify that I possess the authority including the necessary requisite property interests to undertake the proposed activities. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirements of obtaining the permits requested before commencing the project. I understand that local permits may be required before the state removal-fill permit is issued. I understand that payment of the required state processing fee does not guarantee permit issuance.

Lou Mahar	Builder
~~Print/Type Name (coapplicant)~~	Title
~~Applicant Signature (coapplicant)~~	12/2/03
	Date

I certify that I may act as the duly authorized agent of the applicant.

Print/Type Name	Title
Authorized Agent Signature)	Date

SUPPLEMENTAL WETLAND IMPACT INFORMATION*
(FOR WETLAND FILLS ONLY)

Site Conditions of impact area

Impact area is: [ ] Ocean [ ] Estuary [ ] River [ ] Lake [X] Stream [ ] Freshwater Wetland

Note: Estuarian Resource Replacement is required by state law for projects involving intertidal or tidal marsh alterations. A separate Wetlands Resource Compensation Plan may be appended to the application.

Has a wetland delineation been completed for this site? [X] Yes [ ] No

If yes, by whom:
Terra Science, Inc.
Post Office Box 2100
Portland, OR 97208-2100

Describe the existing physical and biological character of the wetland/waterway site by area and type of resource (use separate sheets and photos, if necessary).

See attached permit text.

Resource Replacement Mitigation
Describe measures to be taken to replace unavoidably impacted wetland resources.

See attached permit text.

* Because this information is not necessary for a complete application, you may submit this sheet and other environmental information after submitting your application.

LIMITED POWER OF REPRESENTATION

BE IT KNOWN, that Pacific Trend Building Company has made and appointed Terra Science, Inc. and its employees (herein Terra Science, Inc.) to represent, on a limited basis, the interests of and communicate on behalf of the Stonegate Estates, Phase 1 residential subdivision project located east of North Phoenix Road, north of Coal Mine Road, and south of Harbrooke Road in the southeast part of Medford, Jackson County, Oregon for the following specific and limited purposes only:

1.) To prepare, submit and revise materials pertaining to a wetland fill application to be considered by the Oregon Division of State Lands and/or U.S. Army Corps of Engineers. Such materials include, but are not limited to, wetland delineation, permit forms and graphics, conceptual drawings, real estate information, functional assessments, compensatory mitigation, and related wetland fill permit application documents.

2.) To communicate and receive correspondence and documents from Oregon Division of State Lands, U.S. Army Corps of Engineers, plus other state and federal agencies that participate in the wetland fill permitting process.

3). To review and respond to private sector, non-profit and public agency comments and/or concerns pertaining to the wetland delineation and fill permitting process.

4). To coordinate between Pacific Trend Building Company and the above-mentioned agencies any amendments to the site plans.

5). To review and approve draft permit conditions from Oregon Division of State Lands, and U.S. Army Corps of Engineers.

THIS LIMITED POWER OF REPRESENTATION DOES NOT GRANT Terra Science, Inc. limited or full legal power of attorney. This limited power of representation does not designate Terra Science, Inc. to serve as an authorized agent, nor authorize Terra Science, Inc. to assign or accept responsibility to fill, remove or alter waters of Oregon and the United States. This limited power of representation may be ratified, rescinded or revoked, without notice or cause, by any of the signature parties or Terra Science, Inc.

I, THE UNDERSIGNED AND OWNER, execute this limited power of representation this 9 day of DEC., 2003.

Lou Mahar
Pacific Trend Building Company

Stonegate Estates, Phase 1 Adjacent Property Owners

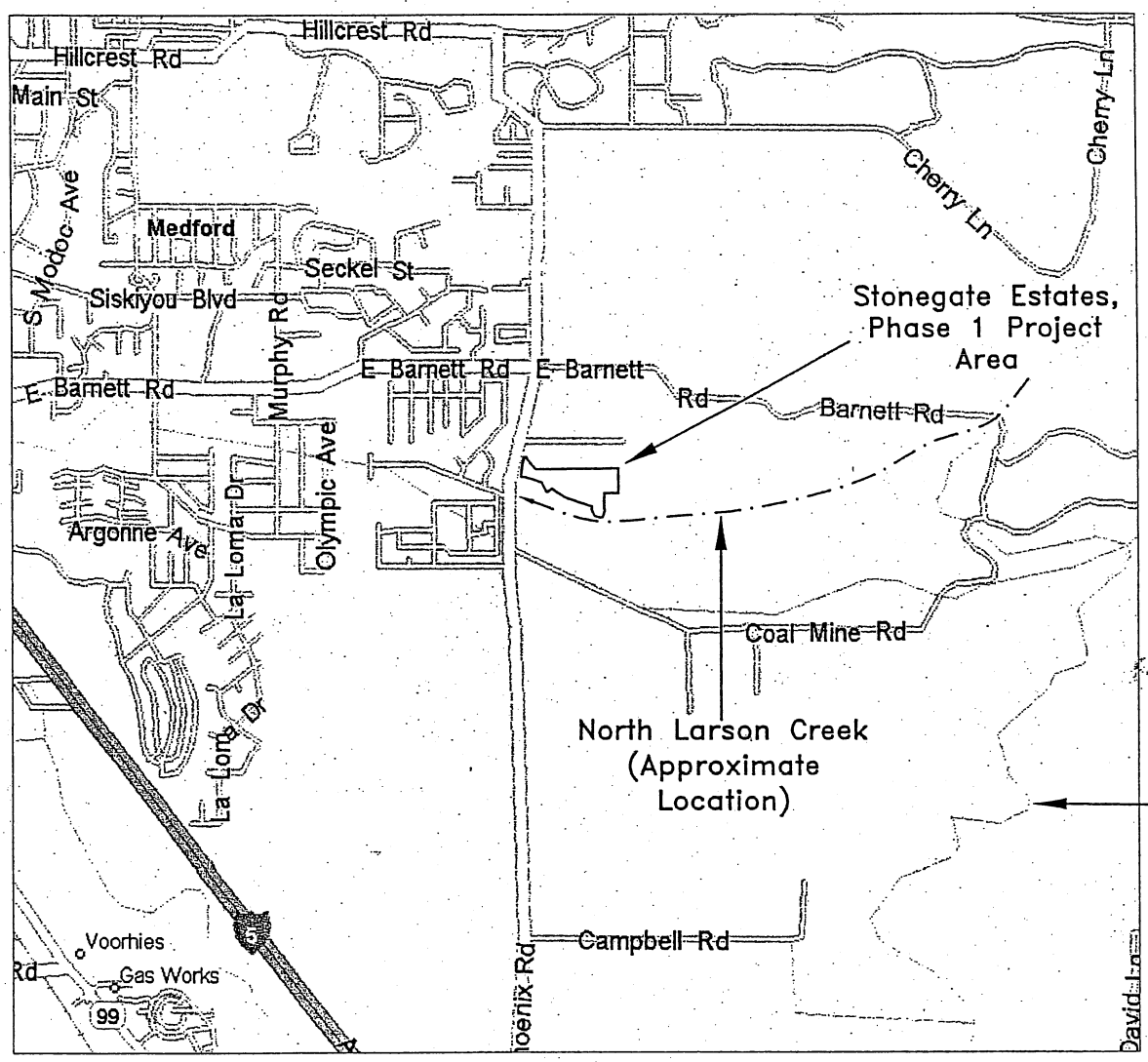
LORI K.DUNLAP
3600 HARBROOKE ROAD
MEDFORD, OR 97504

TERRY & DOROTHEE GREGG
3660 HARBROOKE ROAD
MEDFORD, OR 97504

LORENE R. HALE
3720 HARBROOKE ROAD
MEDFORD, OR 97504

THOMPSON FAMILY INVEST.
4131 COAL MINE ROAD
MEDFORD, OR 97504

HENRY & ANNETTE SNOW
558 PRUETT ROAD
EAGLE POINT, OR 97524



SOURCE: Microsoft Streets & Trips, 2001.

Terra Science, Inc. Soil, Water, & Wetland Consultants	WETLAND FILL APPLICATION FOR THE STONEGATE ESTATES, PHASE 1 RESIDENTIAL SUBDIVISION Medford, Jackson County, Oregon	VICINITY
SCALE: 1 INCH=±2640 FEET 0 1320 2640 5280	December 2003	FIGURE 1

Division of State Lands
Compensatory Mitigation Form
(revised 11/2/2001)

If your project involves more than the number of slots on these pages, then add additional pages and attach them together. Please be sure to complete Item #1 and the grand total acreages for impacts and mitigation, Items #2 and #3. Give breakdowns by Cowardin and Hydrogeomorphic (HGM) class.

If using a wetland mitigation bank, please provide written proof of use from the bank operator and check the mitigation bank box below. Complete only Item #1 if the DSL resource coordinator will allow use of a mitigation bank or the Payment to Provide Mitigation option to be used.

1. Pacific Trend Building Co. (Applicant Name) Stonegate Estates, Phase 1 (Project Name) _____ (Permit No. (if known))

MITIGATION SITE LOCATION

Mitigation Site # 1 of 1 Adjacent Waterway Larson Creek

County Jackson Section 34 Township 37S Range 01W Tax Lot(s) North part of 2000

U.S.G.S. Hydrologic Unit Code (HUC) No. 17100308

River Basin Name Middle Rogue ☐ Mitigation Bank Utilized ☐ Payment to Provide Utilized

WETLAND IMPACTS

2. What wetland acreage and wetland type or types will be filled, removed, or converted by your removal-fill project? (Not the compensatory mitigation project.) List all of the types. Wetland types are the "Cowardin" and "hydrogeomorphic" classifications of each of the wetlands proposed to be altered by your project. The Cowardin and HGM class codes on listed on the last page of this form. Indicate the acreage involved for each wetland type you list. Acreages should be listed to the 1/100 of an acre if possible.

Filled			Removed			Converted		
Acreage	Cowardin	HGM	Acreage	Cowardin	HGM	Acreage	Cowardin	HGM
None								

Grand Total of Wetland Impacts None **Acres**

The project would not impact wetlands, but jurisdictional waters impacts total 0.03-ac.

COMPENSATORY MIT TION

3. List all of the wetland types (on the reverse side) that will result from your proposed compensatory mitigation project by mitigation kind and wetland type. Indicate the acreage involved for each wetland type you list.

RESTORATION

Acreage	Cowardin	HGM	Acreage	Cowardin	HGM	Acreage	Cowardin	HGM
0.03	R4SBC	RFT						

Restoration Total 0.03 **Acres**

ENHANCEMENT

Acreage	Cowardin	HGM	Acreage	Cowardin	HGM	Acreage	Cowardin	HGM
0.06	R4SBC	RFT						

Enhancement Total 0.06 **Acres**

CREATION

Acreage	Cowardin	HGM	Acreage	Cowardin	HGM	Acreage	Cowardin	HGM
None								

Creation Total N/A **Acres**

Grand Total of Wetland Mitigation 0.09 **Acres**

4. Is part or all of the compensatory mitigation project site a prior converted cropland, a farmed wetland or a former wetland that is now upland? If known, state which type below:

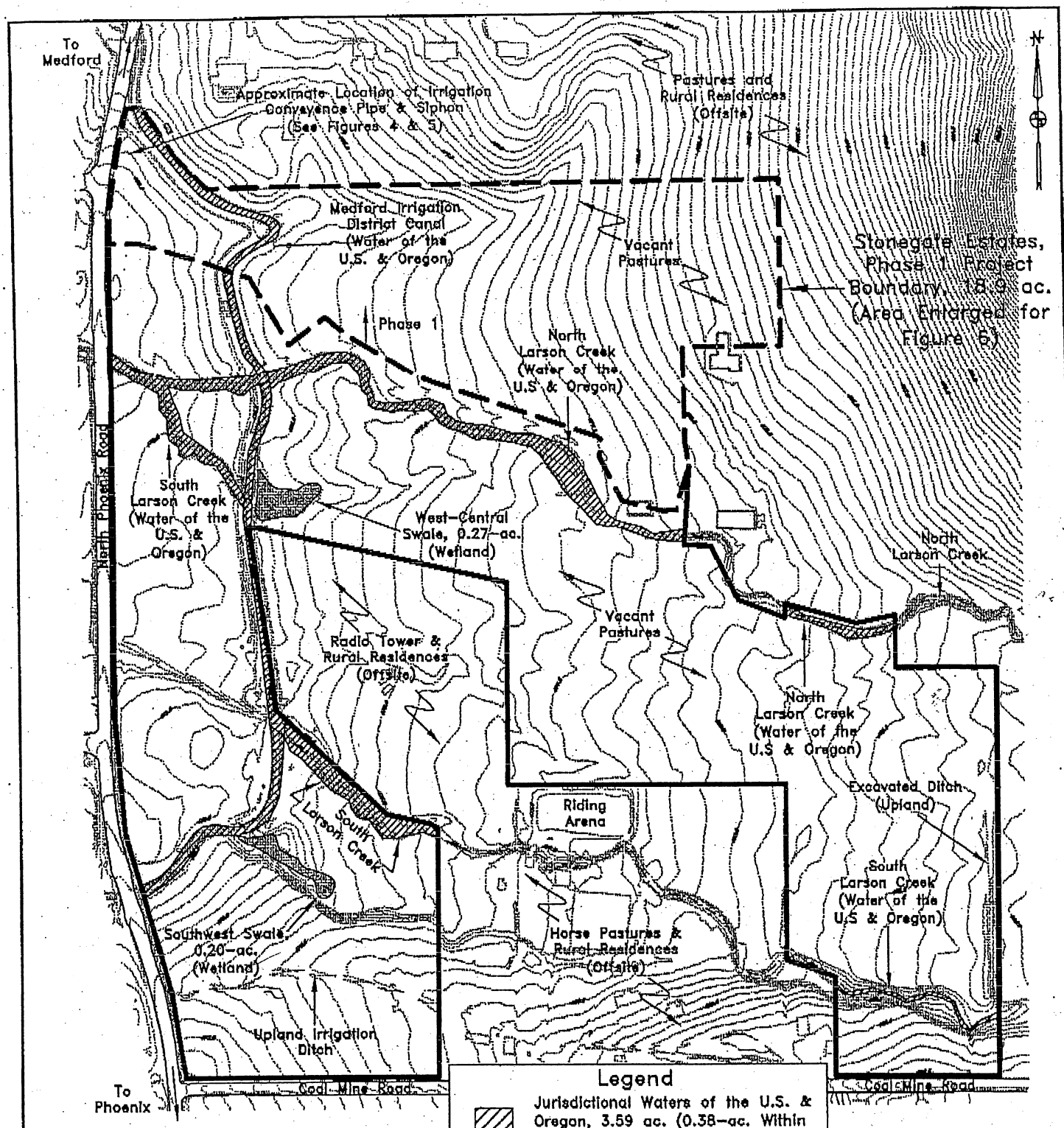
No

5. If an upland buffer is proposed, please give average width and type:

	Ave. Width (ft.)	Acres (sq. ft.)
Forested		
Scrub/Shrub		
Herbs/Grasses		
Buffer Total	N/A	N/A

6. Form completed by _____ Greg Swenson _____ December 11, 2003

(Signature) (Printed Name) (Date)



Adapted from Hoffbuhr & Assoc., Inc. wetland boundary and topographic survey, 2001.

Terra Science, Inc.
Soil, Water, & Wetland Consultants

SCALE: 1 INCH=±350 FEET
0 175 350 700

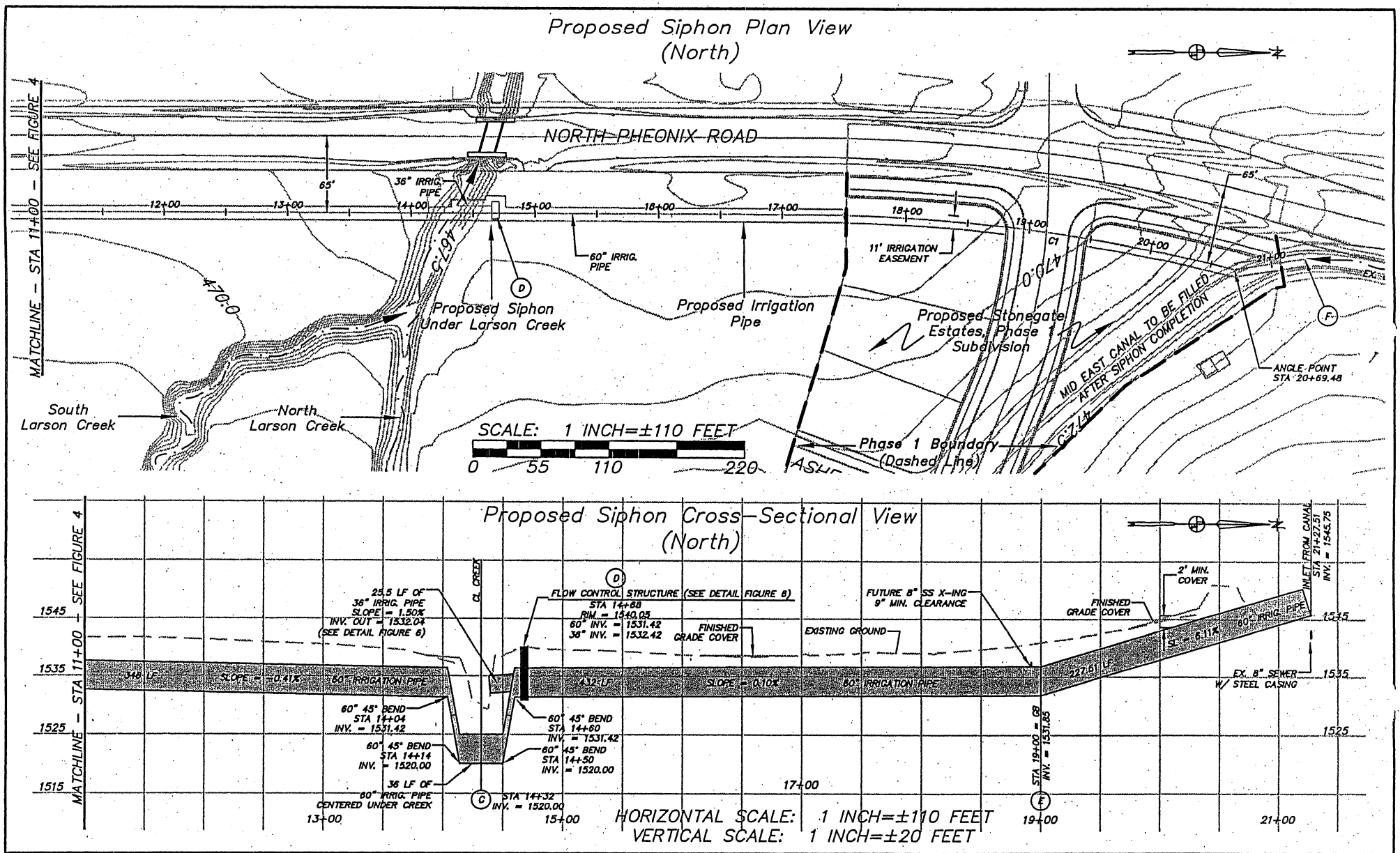
WETLAND FILL APPLICATION FOR THE STONEGATE ESTATES, PHASE 1 RESIDENTIAL SUBDIVISION
Medford, Jackson County, Oregon

EXISTING CONDITIONS & SITE TOPOGRAPHY

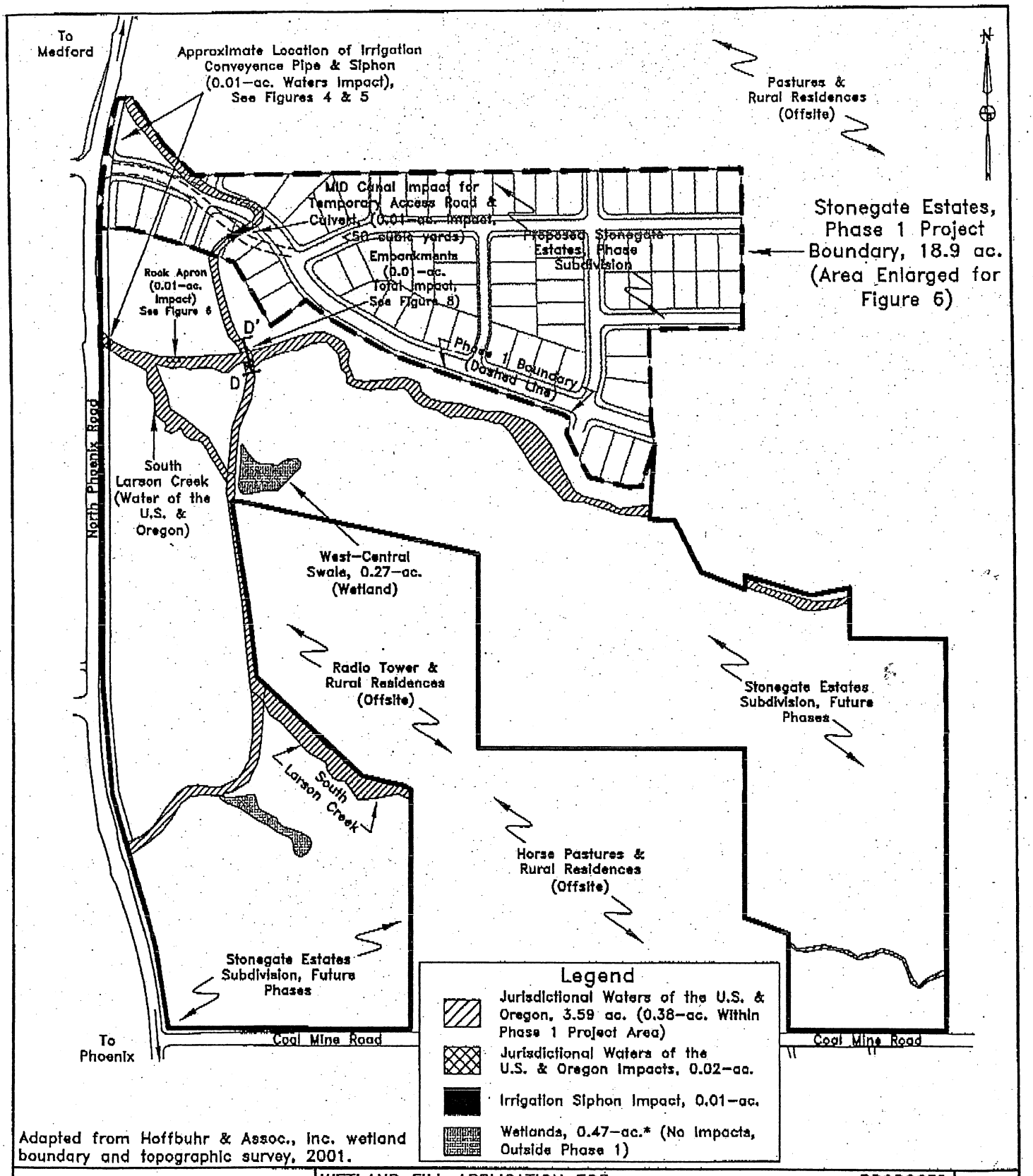
December 2003

*Concurrence from DSL July 17, 2001 DSL Det. No. 00-0548

FIGURE 2



Terra Science, Inc. Soil, Water, & Wetland Consultants	WETLAND FILL APPLICATION FOR THE STONEGATE ESTATES, PHASE 1 RESIDENTIAL SUBDIVISION Medford, Jackson County, Oregon	PROPOSED SIPHON DETAIL (NORTH)
Variable Scale	December 2003	FIGURE 4



Adapted from Hoffbuhr & Assoc., Inc. wetland boundary and topographic survey, 2001.

Terra Science, Inc.
Soil, Water, & Wetland Consultants

SCALE: 1 INCH=±350 FEET
0 175 350 700

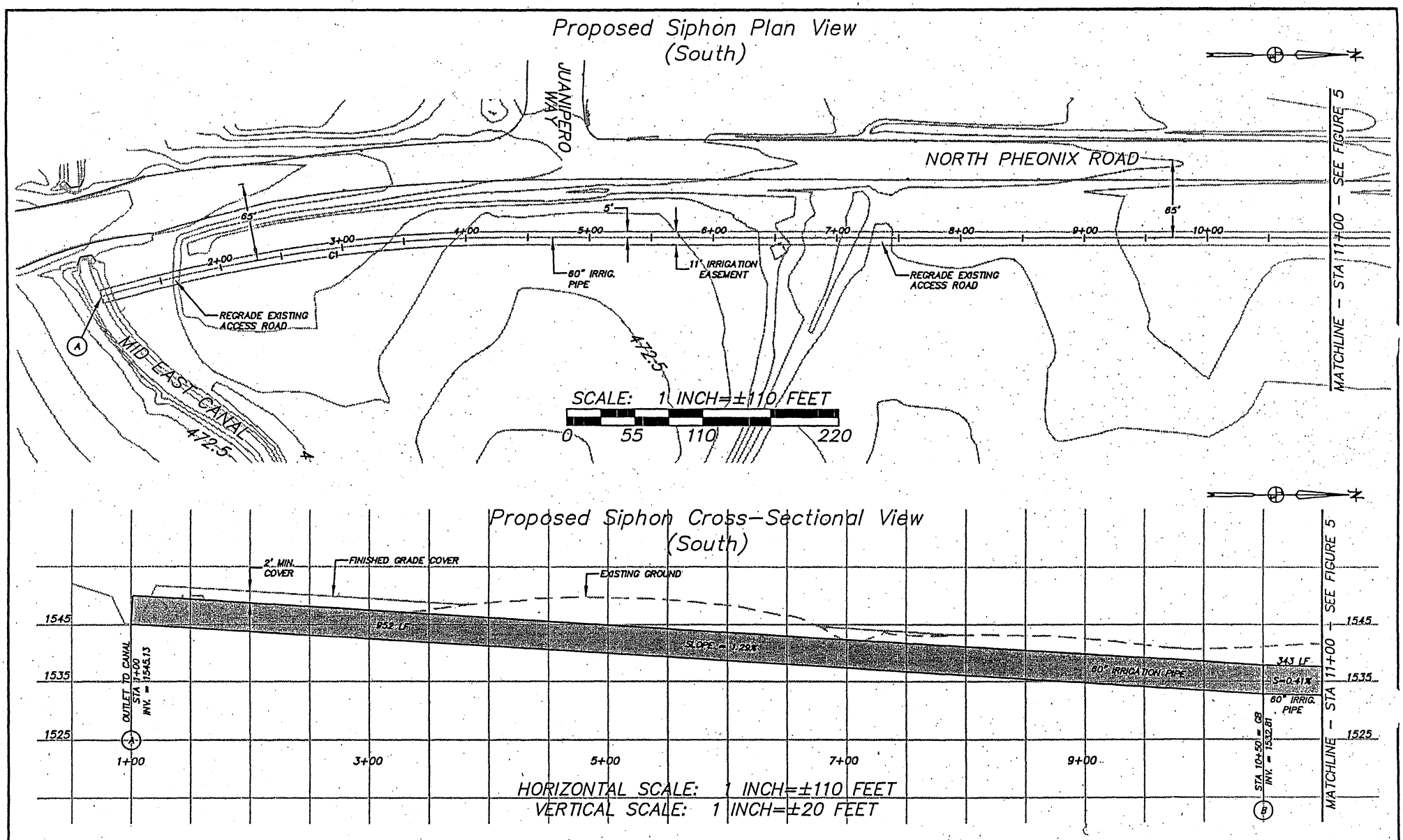
WETLAND FILL APPLICATION FOR THE STONEGATE ESTATES, PHASE 1 RESIDENTIAL SUBDIVISION
Medford, Jackson County, Oregon

PROPOSED DEVELOPMENT & WATERS IMPACTS

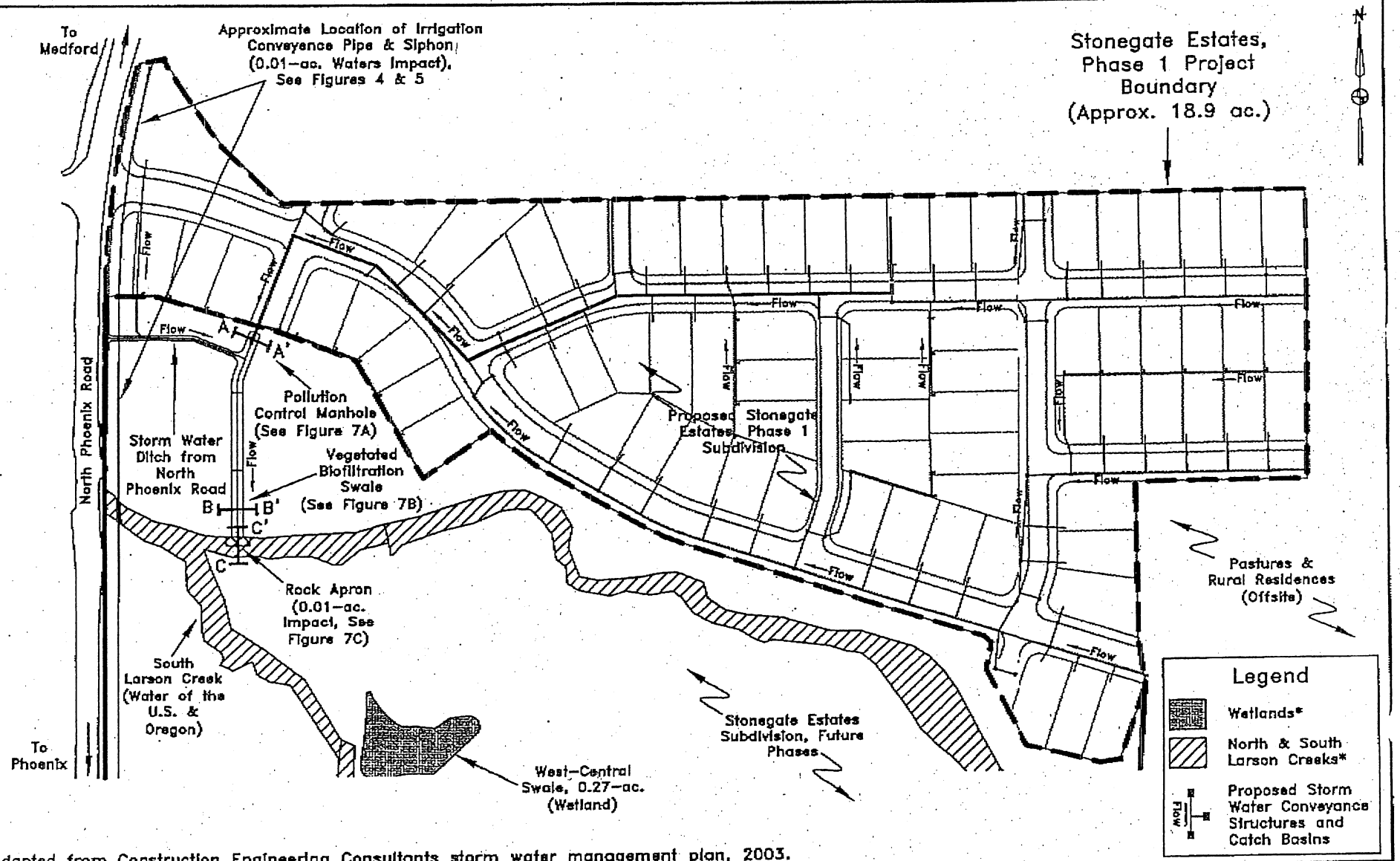
December 2003

*Concurrance from DSL July 17, 2001
DSL File Det. No. 00-0548

FIGURE 3



Terra Science, Inc. Soil, Water, & Wetland Consultants	WETLAND FILL APPLICATION FOR THE STONEGATE ESTATES, PHASE 1 RESIDENTIAL SUBDIVISION Medford, Jackson County, Oregon	PROPOSED SIPHON DETAIL (SOUTH)
Variable Scale	December 2003	FIGURE 5



Adapted from Construction Engineering Consultants storm water management plan, 2003.

Terra Science,Inc.
Soil, Water, & Wetland Consultants

SCALE: 1 INCH=200 FEET
0 75 150 300

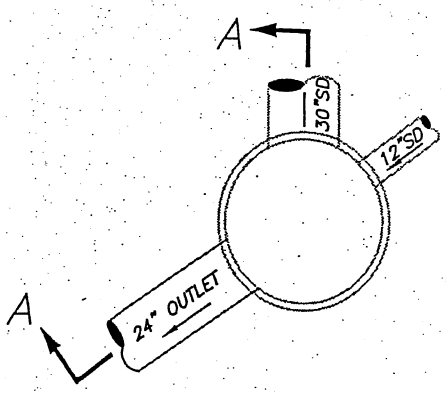
WETLAND FILL APPLICATION FOR
THE STONEGATE ESTATES, PHASE 1
RESIDENTIAL SUBDIVISION
Medford, Jackson County, Oregon

December 2003

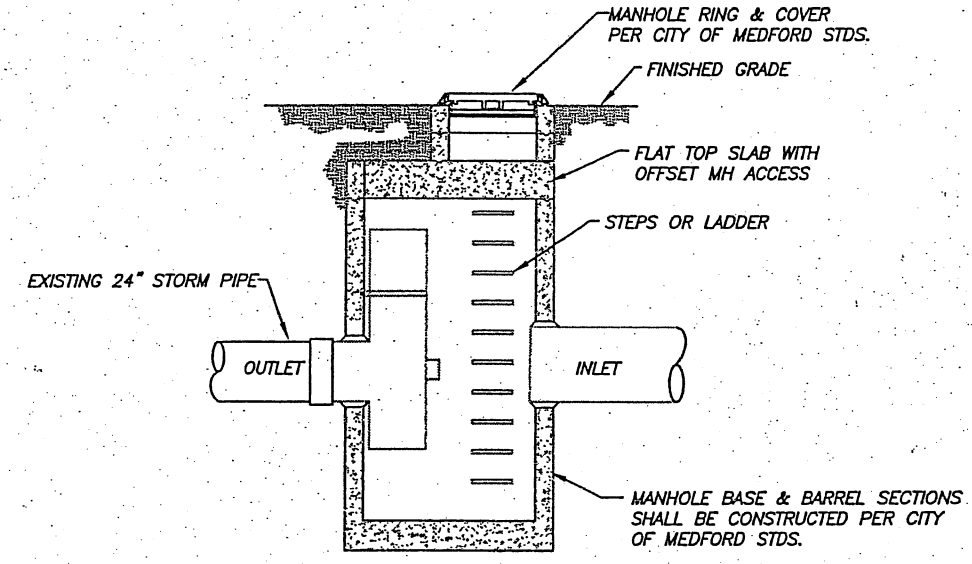
PROPOSED STORM WATER MANAGEMENT PLAN

*Concurrence from DSL July 17, 2001
DSL File Ref. No. 00–0548

FIGURE 6



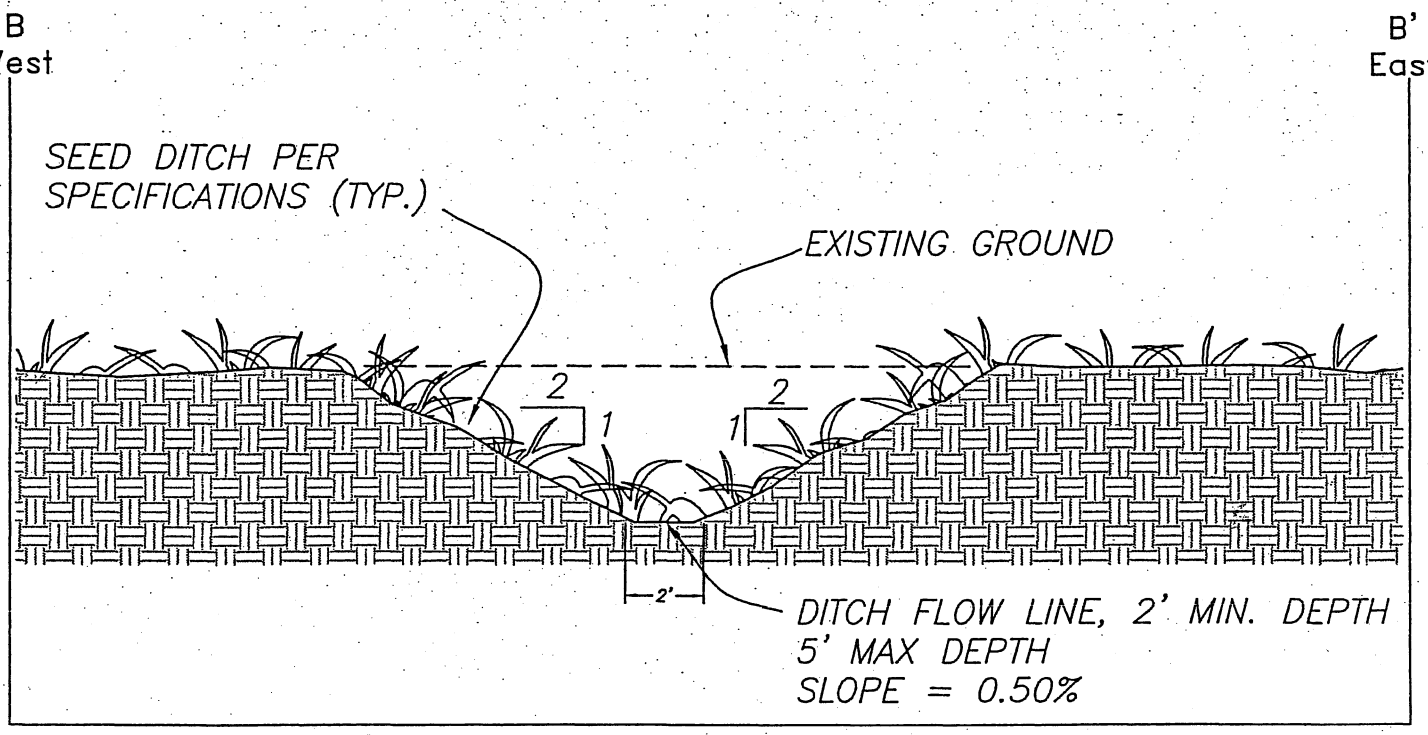
PLAN VIEW



SECTION "A–A"

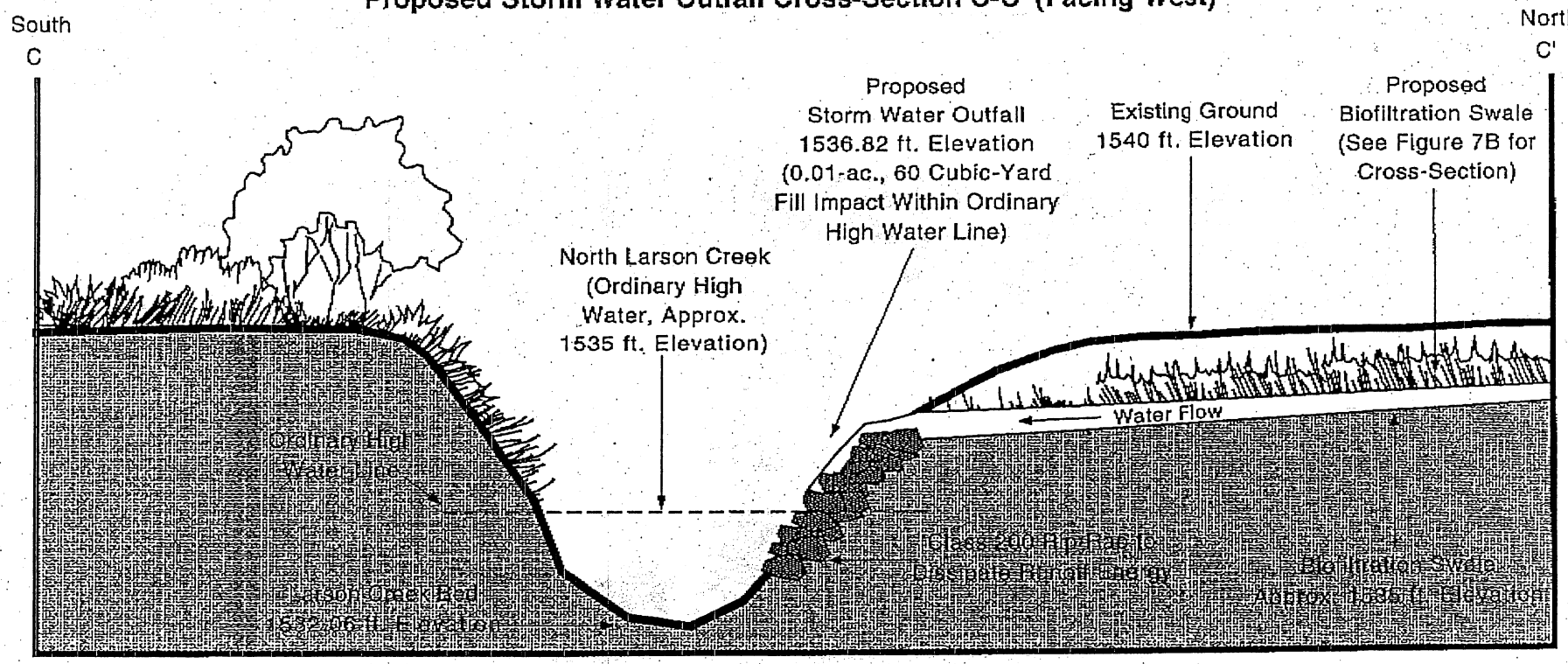
POLLUTION CONTROL STRUCTURE DETAIL

Terra Science, Inc. Soil, Water, & Wetland Consultants	WETLAND FILL APPLICATION FOR THE STONEGATE ESTATES, PHASE 1 RESIDENTIAL SUBDIVISION Medford, Jackson County, Oregon	POLLUTION CONTROL MANHOLE DETAIL	FIGURE 7A
Not To Scale	December 2003		



Terra Science, Inc. Soil, Water, & Wetland Consultants	WETLAND FILL APPLICATION FOR THE STONEGATE ESTATES, PHASE 1 RESIDENTIAL SUBDIVISION Medford, Jackson County, Oregon	PROPOSED BIOFILTRATION SWALE CROSS-SECTION	FIGURE 7B
Not To Scale	December 2003		

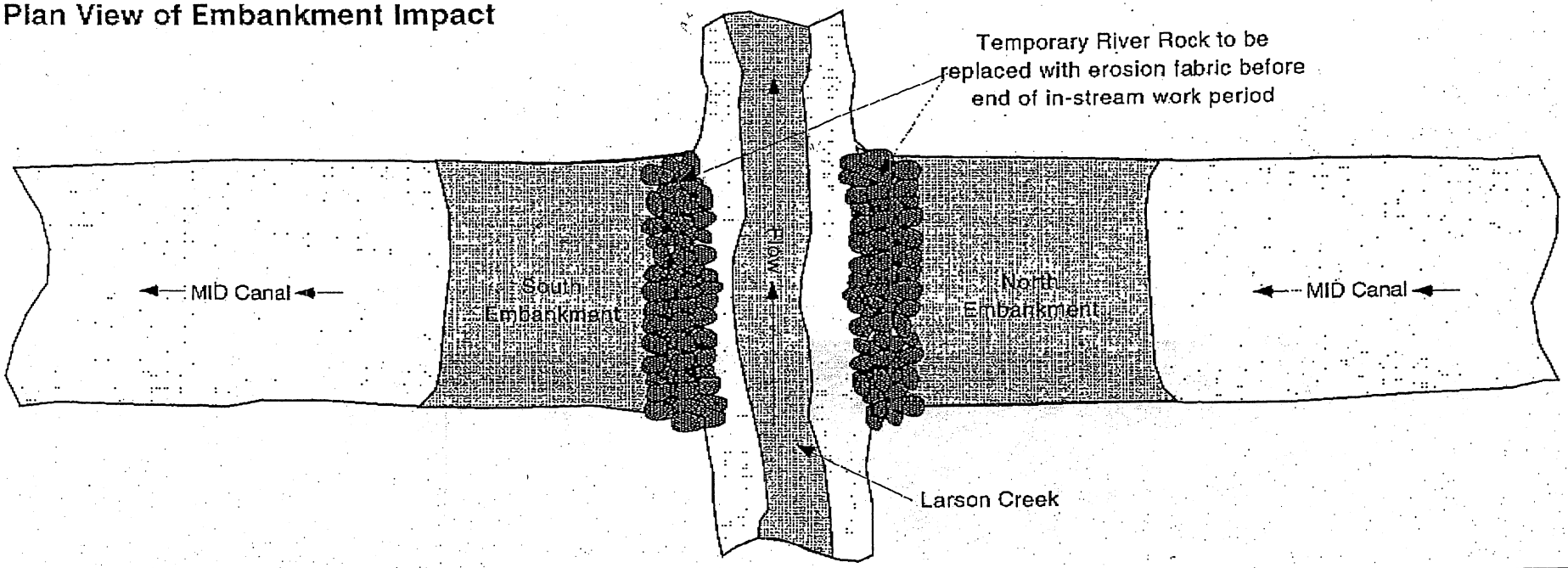
Proposed Storm Water Outfall Cross-Section C-C' (Facing West)

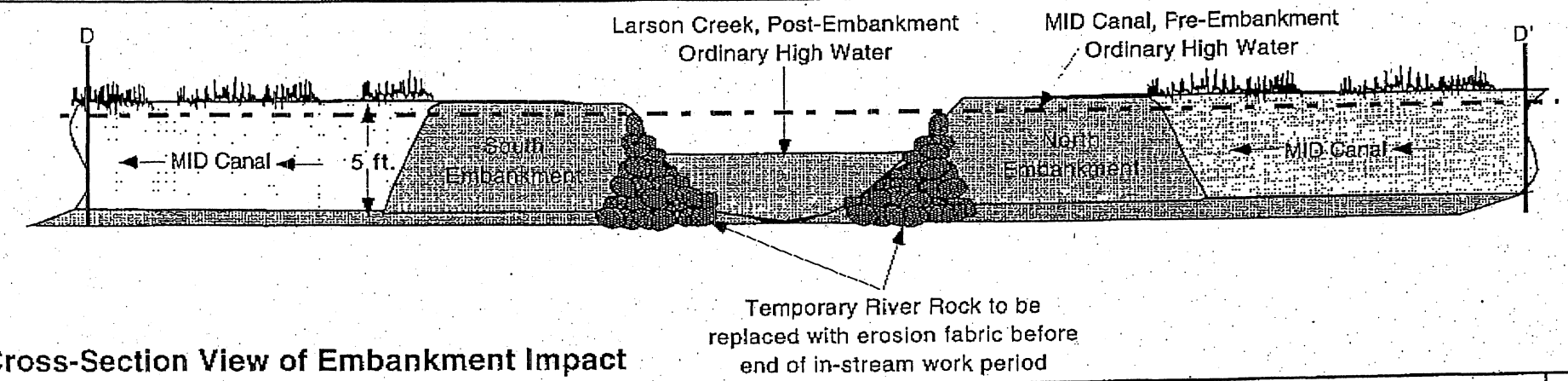


Adapted from Construction Engineering Consultants storm water management plan.

TERRA SCIENCE, INC. *Soil, Water & Wetland Consultants*	WETLAND FILL APPLICATION FOR THE STONEGATE ESTATES, PHASE 1 RESIDENTIAL SUBDIVISION Medford Jackson County, Oregon	STORM WATER OUTFALL CROSS-SECTION C-C'
VERTICAL AND HORIZONTAL SCALE: 1 INCH = 4 FEET 0 4 8	December 2003	**FIGURE 7C**

Plan View of Embankment Impact





Cross-Section View of Embankment Impact

TERRA SCIENCE, INC.
Soil, Water & Wetland Consultants

WETLAND FILL APPLICATION FOR
THE STONEGATE ESTATES, PHASE 1
RESIDENTIAL SUBDIVISION
Medford Jackson County, Oregon

STORM WATER OUTFALL
CROSS-SECTION D-D'

FIGURE 8

VERTICAL AND HORIZONTAL
SCALE: 1 INCH = 8 FEET

0 8 16

December 2003

APPENDIX A

ADDITIONAL PERMIT TEXT FOR THE STONEGATE ESTATES SUBDIVISION, PHASE 1, MEDFORD, JACKSON COUNTY, OREGON.

Proposed Project Purpose & Description

Project Purpose and Need

Steady population growth within the Medford City Limits during the past decade has led to an increase in the demand for middle-income housing. In response to this need, Pacific Trend Building Co. (Lou Mahar, developer/builder) proposes to build the first phase of Stonegate Estates, a single family dwelling residential subdivision. The proposed subdivision would also include the construction of several residential streets, sidewalks, a paved bike path, and a subsurface drainage system for storm water management. In addition, summer irrigation water that currently flows through the existing Medford Irrigation District (MID) East canal would be diverted to a subsurface pipeline along North Phoenix Road that would siphon under Larson Creek. The project conforms to the City of Medford's Master Plan which mandates improved connectivity between residential and/or arterial streets.

Project Description

The proposed subdivision and irrigation canal siphon would occupy the north part of Tax lot 2000 on Jackson County Assessor's map no. 37-1W-34. Specifically, the project site is located east of North Phoenix Road, south of Harbrooke Road, and north of North Larson Creek in the southeast part of Medford, Jackson County, Oregon (Figure 1). Much of the site is currently a grazed pasture that is dissected in the west part by the north-south trending MID East canal.

For construction of Stonegate Estates, Phase 1, the land would be subdivided into 72 residential lots and would provide additional road segments to meet increased traffic needs. The primary entrance road (Creek View Drive) would extend eastward from North Phoenix Road and cross the existing MID canal. Due to the early summer construction schedule, this crossing would require the installation of a temporary 60-inch diameter culvert for construction access and irrigation water conveyance. The temporary culvert would be removed after the MID canal is abandoned (see following paragraphs) to facilitate the completion of the roads and other infrastructure. Storm water runoff generated by the proposed subdivision would be routed to a new storm water outfall at the north side of North Larson Creek.

As part of a cooperative effort between Pacific Trend Building Co. and the Rogue Basin Fish Access Team (RBFAT)(Steve Mason, Project Manager), irrigation water would be removed from the MID canal and diverted to a subsurface pipeline along the east edge of North Phoenix Road. The pipeline would extend from the existing north end of the MID canal southward and connect to the existing south end of the canal to convey irrigation water to downstream users (Figures 2 through 5). Three flashboard diversion structures (fish barriers) would also be removed as part of the project.

Construction of an irrigation siphon is proposed to convey irrigation water through the pipeline and underneath North Larson Creek. The siphon would require the excavation of a temporary 10-foot wide by 30-foot long trench perpendicular to the

4710 S.W. Kelly Avenue, 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

creek channel to accommodate the proposed 66-inch pipeline and 36-inch overflow outfall. Installation of the siphon and outfall would take approximately 1 day, then the trench would be backfilled and smoothed to return the construction area to a viable stream channel. The side slopes would also be re-seeded and irrigated after construction to promote rapid revegetation and to limit sediment loads within Larson Creek (see "Erosion Control Measures" section of this application). Finally, the disturbed zones would be planted with native trees and shrubs the following dormant season to offset the loss of any native woody plants that are removed during construction.

Immediately after construction of the irrigation siphon and removal of flashboard diversion structures, the sections of the MID canal that flow directly into North Larson Creek would be blocked to prevent any water or fish from entering the abandoned canal. To accomplish this, earthen embankments would be created within the MID canal at the north and south sides of the North Larson Creek/MID canal junction. Similarly, two additional earthen embankments would be created at the South Larson Creek/MID canal junctions as part of the Windsor Estates mitigation project (as per recommendations from Jerry Vogt, Oregon Department of Fish and Wildlife (ODFW), Central Point Office) for improved flows within South Larson Creek and to preclude fish from entering the remaining sections of the abandoned canal. The construction of the Windsor Estates wetland mitigation would occur just south of the proposed development (offsite) as authorized by Oregon Division of State Lands permit #30143-FP and U.S. Army Corps of Engineers permit #200300194.

As part of a fish habitat/fish access enhancement project, RBFAT would rehabilitate an additional 400-foot section of South Larson Creek. RBFAT is coordinating with the U.S. Bureau of Reclamation, Medford Irrigation District (MID), Talent Irrigation District (TID), Rogue Valley Irrigation District, Bear Creek Watershed Council, and the City of Medford to provide technical and financial support for the fish access aspect of the project. **All rehabilitation activities that would occur within South Larson Creek beyond the permitted wetland mitigation for the Windsor Estates project would be addressed in a separate fish access enhancement application completed by RBFAT.**

MA

Project Criteria and Alternatives

The selection of a suitable project site for the proposed residential subdivision followed criteria established by the applicant. The applicant primarily builds homes for middle-income homebuyers, so suitable properties are typically closer to the center of Medford or in the southeast quadrant of Medford. A moderate cost of land is necessary to keep the home price low enough for middle income buyers. Hillside land east of the proposed project site was considered too expensive, due to high construction costs for steep slopes. In addition, the site is already owned by the applicant and provides an excellent opportunity to restore historic fish habitat within a degraded section of Larson Creek.

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

Impact Avoidance and Minimization

Avoidance of the 0.03-acre of jurisdictional waters is not possible due to the north-south configuration of the MID canal in the west part of the site and the need for the siphon under Larson Creek to maintain irrigation water deliveries to downstream users. Avoidance of the canal would require a costly bridge span and eliminate at least two lots from the proposed layout. The applicant initially considered installing a culvert to allow irrigation water to continue through its current course; however, this option was deemed less beneficial to fish habitat within Larson Creek due to seasonal irrigation cycles.

Several options for construction of the proposed siphon and pipeline were considered during the planning phases of this project. Directional boring beneath the creek was investigated to eliminate the need for trenching, but hard bedrock in the vicinity of the proposed siphon makes this option impracticable. Installation of a pipeline above Larson Creek was also determined to be infeasible due to the large diameter of the pipe (66 inches) and inherent risk of failure during flood events within Larson Creek. Use of a smaller diameter pipe would not convey a sufficient volume of water and would potentially cause flooding upstream of the inlet. Similarly, the 36-inch storm water outfall (flow control structure) is proposed as per City of Medford standards to prevent flooding due to the limited capacity of the existing irrigation canals and ditches. As such, the current proposal was deemed the only practicable alternative.

Construction of the irrigation siphon and rock apron associated with the subdivision storm water outfall would occur within the preferred in-water work period established by ODFW (June 15 to September 15). In addition, the work areas would possibly be dewatered by using diversion channels, coffer dams, and/or temporary pipes. If needed, a diversion channel would be excavated from upland and lined with durable plastic to minimize turbidity and provide fish passage. Installation of a temporary pipe would achieve the same function; however, the logistics of the construction site may preclude the use of such a pipe. Prior to construction, the applicant would consult with ODFW and/or NMFS for the most appropriate dewatering technique.

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

Table 1. Summary of wetland impacts by type and proposed mitigation by category.

Fill Impacts (Waters of the U.S. & Oregon only)	Acres	Proposed Mitigation
Larson Creek Siphon (Permanent Impact)	0.01	
MID East Canal Fish Passage / Larson Creek Flow Pattern Improvement Embankments (Permanent MID Canal Impact)	0.01	All impacted areas would be restored after construction, plus additional native plantings would be installed for creek bank enhancement.
Rock Apron for Residential Storm Water Outfall (Permanent Larson Creek Impact)	0.01	
Total Permanent Waters Impacts	0.03-acre	N/A

Proposed Changes To Hydraulic Characteristics

The proposed development and piping of the existing irrigation system would likely have a substantial effect on Larson Creek and two small wetland swales that extend eastward from the MID canal (West-Central swale and Southwest swale, documented by TSI in October 2000). Currently, North Larson Creek is used to convey up to 9 cfs of irrigation water that is delivered by the Talent Irrigation District (TID). Water from the TID East canal flows directly into North Larson Creek approximately 2 miles east of the project area (Figure 1). The water then flows westward through the creek until it reaches the MID canal and two flashboard diversions. A small volume of water continues west and under North Phoenix Road (Larson Creek base flow) while the bulk of the water is diverted south through the MID canal. Simultaneously, MID water originating north of the project area flows south through the MID canal and merges with TID water. These combined flows continue south through the MID canal and discharge offsite.

For construction of the proposed subdivision, all of the MID water that flows onsite would be contained in a subsurface pipe along North Phoenix Road. This would effectively remove up to 60 cfs of summer irrigation water from over 700 feet of the MID canal that doubles as a reach of South Larson Creek (this reach would also serve as the future mitigation area for the Windsor Estates project). Once this water is piped, the flashboard diversion structures would also be removed and the canal would be regraded allowing South Larson Creek to flow its natural course.

The result of eliminating MID water and the flashboard structures would be diminished artificial backflooding within North and South Larson Creek and adjacent wetlands

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

during summer months. It is anticipated that approximately 350 feet of North Larson Creek and 250 feet of South Larson Creek will have reduced hydrology during summer irrigation months. Some backflooding may continue to occur within North Larson Creek due to TID flows; however, the flooding would be minimized when the flashboard structures are removed.

Other changes to the hydraulics of Larson Creek would also occur as part of the proposed storm water management plan for the residential subdivision. Currently, the MID canal collects approximately 7 cfs of storm water runoff (2-year event) from the 41-acre watershed north of the project area. This volume of runoff is likely to increase in the future as the area develops. To offset increased runoff, the City of Medford has indicated the need for a storm water bypass/flow control structure where the Larson Creek siphon would be constructed. The bypass would allow the siphon to be closed at the end of irrigation season and would divert all of the storm water that enters the canal at upgradient locations directly into Larson Creek via a 36-inch outfall. The effect to water quality in Larson Creek would be minimal since all of this runoff currently enters the creek through the existing MID canal. Appropriate erosion controls would be utilized to prevent bank destabilization during high flow periods (discussed further in "Erosion Control Measures").

Proposed Impacts to Navigation, Recreation and Fisheries

The proposed project would ultimately enhance the functions and values of Larson Creek for fisheries and recreation. For example, the completed irrigation siphon under Larson Creek would restore fish habitat by removing barriers to fish passage and eliminating MID water deliveries. As part of the proposed residential subdivision, the developer has agreed to deed a 50-foot corridor along both forks of Larson Creek to the City of Medford. This "greenway" would remain vegetated and provide shade to Larson Creek, further enhancing fish habitat. Several bike paths are proposed for the Stonegate Estates development that would allow residents to access the proposed corridor. No impacts to navigation would occur as a result of the proposed project.

Storm Water Management

The site plan for Stonegate Estates, Phase 1 has a favorable layout (as per Department of Environmental Quality requirements) that accommodates future increases of storm water runoff from the new residential development. Storm water runoff from the proposed development would be pre-treated before discharging to Larson Creek, with no discharge to the MID canal, as per City standards. The project engineer (Mike Zarosinski, Construction Engineering Consultants, Inc.) has designed the project so that all storm water runoff (approximately 17 cfs for a 2-year event) would be routed through a series of catch basins, subsurface conveyance pipes, and a pollution control manhole to a 200-foot long vegetated biofiltration swale situated north of the new irrigation siphon (Figure 6). Most of this water does not currently discharge directly to Larson Creek, so a new point source would be created during construction of the subdivision. This new volume of water would not be detrimental to Larson Creek since the runoff would be pre-treated using the vegetated biofiltration swale and the

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

discharge point would include a rock apron to prevent erosion. Figures 7A and 7B show a pollution control manhole detail and cross-section of the proposed biofiltration swale.

Erosion Control Measures

Erosion controls would be necessary during and after construction of the irrigation siphon since erosion risk is moderate to high due to the presence of flowing water and threatened fish habitat. In particular, jute and coir matting would be used within the channel and along the new banks to stabilize the topsoil. Also, in-stream sediment curtains or mats would be installed to further reduce sediment transport. A qualified professional would install the matting using wooden and degradable steel "staples" (to secure the matting to the ground). A small amount of rip-rap would line the Larson Creek channel at the siphon bypass structure (36-inch outfall) and subdivision storm water outfall to prevent scouring during high-flow periods. Finally, a native seed mixture would be broadcast on all other slopes adjacent to the erosion control matting and rip-rap. If necessary, a temporary irrigation system would be set up to achieve adequate ground cover prior to autumn rains. On an as needed basis, other erosion control measures and best management practices would be applied elsewhere on the development site. This may include the installation of silt fencing, hay bales, and erosion control blankets as prescribed by the City of Medford.

Supplemental Wetland Impact Information

Description of the physical and biological characteristics of the wetland.

A wetland delineation for the proposed subdivision and siphon site was conducted by Terra Science, Inc. of Portland, Oregon in October 2000. The wetland delineation included multiple sample points to define upland and wetland areas, plus narrative discussion and maps. As documented by the wetland delineation report, the Phase 1 project area contains 0.36-acre of the MID East canal and 0.02-acre of North Larson Creek. The delineation report has been reviewed and concurred with by Division of State Lands (July 17, 2001) and it is included as additional reference in Appendix B.

Larson Creek is composed of two forks (North and South) that originate approximately 2 miles east of the project site. To the east of North Phoenix Road, both forks of Larson Creek have been degraded by adjacent agricultural activities, summer irrigation flows from the MID and TID, and the construction of North Phoenix Road. Specifically, cattle from surrounding lands and runoff from these pastures can freely enter the creeks resulting in degradation to the creek banks and impacts to water quality.

The north-south trending MID canal was constructed circa 1920 (according to MID personnel) to provide irrigation water for pear and fruit orchards along the east side of the Bear Creek valley. Currently, the MID canal is incised approximately six feet deep with very steep banks composed of side cast (dredge) spoils. Flashboard dams reduce the natural flow amount of North Larson Creek (to the west) by diverting that water to

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

the south through the MID canal. This section of the canal now provides the only connection between the two creeks. Further channelization occurred when North Phoenix Road was constructed and a box culvert was installed under the road (vicinity of the proposed siphon). Reflecting a history of disturbance, the vegetation community along the banks of the MID canal and Larson Creek within the project site is dominated by pasture grasses, Himalayan blackberry, and willow.

Despite historical and ongoing disturbances to Larson Creek, the south fork is designated as Essential Indigenous Salmonid Habitat (ESH) by the Oregon Division of State Lands. Larson Creek (both forks) is also designated as Critical Habitat for the Southern Oregon/Northern California Coastal run of Coho salmon by the National Marine Fisheries Service, though actual spawning and rearing within Larson Creek generally only occurs near its confluence with Bear Creek (StreamNet.org website, June 19, 2003). A conversation with the Oregon Department of Fish and Wildlife (Jerry Vogt, Central Point office) further confirmed the presence of cutthroat trout, steelhead, and fall run Chinook in Bear Creek and Larson Creek.

Threatened and Endangered Species Assessment

A search of the U.S. Fish & Wildlife Service database was conducted for this project for both Federal and State listed threatened, endangered, and candidate species. The results of the inquiry found several records of listed plant and animal species that have been observed near the site (Appendix C). This record indicates that the Northern California/Southern Oregon Coast run of the Coho salmon (*Oncorhynchus kisutch*) populations have occurred within a two-mile radius of the site (Bear Creek and its tributaries). While the proposed development and irrigation siphon would impact Larson Creek, the proposed stream rehabilitation project and permitted mitigation activities would vastly improve upon the functional attributes of the creek. Further, the Oregon Department of Fish and Wildlife (ODFW) has verified that Coho salmon have only been found on the west side of North Phoenix Road, closer to Bear Creek. However, no in-water construction would occur outside of preferred in-stream work period prescribed by ODFW. Additional measures such as diversion channels and/or conveyance pipes would also be utilized to minimize the potential for an accidental take. The record also indicates that populations of the threatened bald eagle (*Haliaeetus leucocephalus*), threatened vernal pool fairy shrimp (*Branchinecta lynchi*), endangered large-flowered woolly meadowfoam (*Limnanthes floccosa* spp. *grandiflora*), endangered Agate Desert lomatium (*Lomatium cookii*), and endangered Gentner mission-bells (*Fritillaria gentneri)* have occurred within 2 miles of the project site.

According to Frank Isaacs (Senior Faculty Research Assistant/Oregon Cooperative Fish and Wildlife Research Unit) of the Oregon State University Department of Fisheries and Wildlife, the only recorded occurrence of nesting bald eagles is several miles from the development site. In addition, most of the site was historically cleared for agricultural uses. Most of the remaining trees and shrubs are small diameter riparian species (willow, Oregon ash, white alder, etc.) located along Larson Creek. Bald eagles generally prefer larger trees that provide a protective canopy and/or snags for perching and roosting (Washington Department of Fish and Wildlife, 2001). The site

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

could provide food for bald eagles in the form of other birds, rodents, and snakes; however, the site does not provide a unique habitat for these animals. Adjacent properties have similar limitations to bald eagle habitat due to small tree sizes and distribution, urbanization , and historic land clearing for agricultural purposes.

Vernal pool fairy shrimp, large-flowered woolly meadowfoam, and Agate Desert lomatium typically occur within seasonal wetland depressions (vernal pools) and the associated mounds found in the Agate Desert near White City, Oregon. The project site lacks suitable habitat for these species. According to Rare and Endangered Plants of Oregon (Eastman, 1990), Gentner mission-bells is a rare plant that typically occurs in "dry, open fir and oak woodlands." As highly disturbed and grazed agricultural land, the project site consists mainly of non-native grasses and forbs with only scattered trees (mostly within Larson Creek riparian areas) and lacks appropriate habitat for Gentner mission-bells.

Only one candidate species for listing was found, streaked horned lark, *Eremophila alpestris strigata,* but it is also unlikely that this species is present within the project site due to historic disturbances, lack of suitable habitat, and ongoing grazing. That is, the ground-dwelling streaked horned lark inhabits native grasslands and prairies (Center for Biological Diversity, 2003).

Resource Replacement Mitigation

Mitigation Siting Rationale & Description Resource Replacement Mitigation

Although the proposed impacts would result in a minor loss of jurisdictional waters and creek bank, this loss would be offset by increases to the functions and values of Larson Creek after the MID siphon is completed (primarily for anadromous fish habitat). For example, the elimination of irrigation water to Larson Creek would prevent major seasonal fluctuations in water levels due to summer irrigation cycles. This high-velocity pulse of water tends to scour the creek channel disturbing substrates needed for spawning or feeding. Similarly, regular maintenance and excavation of the MID canal effectively removes accumulated sediments and vegetation that would normally provide food and shelter for fish. In the absence of these activities, native vegetation would likely become established along the creek banks providing vertical structure and shade to the creek channel. Installation of the new siphon and removing the flashboard dam structures would also allow South Larson Creek to flow in its normal direction (to the west) year-round instead of reversing course during irrigation season further reducing disturbance to fish habitat. The physical removal of these structures would also allow for a much greater potential for fish access to both forks of Larson Creek. Finally, the restored creek channel would provide increased aesthetics to the adjacent land owners and the citizens of Medford. The following Table 2 specifies the plantings that would be installed to offset the loss of any woody vegetation during construction activities.

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

Table 2: Plantings quantities for the Stonegate Estates, Phase 1 residential subdivision project.

Plant Community	Common Name / Scientific Name	Planting Condition/ Container Size	Quantity
LARSON CREEK BANK RESTORATION/ENHANCEMENT (0.09-acre at 3:1 enhancement ratio)			
	willow (*Salix sp.*, FAC to FACW, estimated)	live stakes, bareroot	50
	white alder (*Alnus rhombifolia*, FAC)	live stakes, bareroot	10
	black cottonwood (*Populus trichocarpa*, FAC)	bareroot, 1 to 2 gallon	10
	bigleaf maple (*Acer macrophyllum*, FACU)	bareroot, 1 to 2 gallon	10
	yarrow (*Achillea millefolium*, NL)	seed	0.2 lbs.
	Sitka brome (*Bromus sitchensis*, NL)	seed	1.0 lbs.
	blue wildrye (*Elymus glaucus*, FACU)	seed	2.0 lbs.
	California poppy (*Eschscholzia californica*, NL)	seed	0.5 lbs.
	Tufted hairgrass (*Deschampsia cespitosa*, FACW)	seed	0.2 lbs.

NOTE: plant species subject to DSL/Corps approval and availability at local nurseries.

Waters Functions and Values

Larson Creek has been severely degraded by encroaching urban development and ongoing agricultural activities; thus it currently has low functions and values. The channel is incised 3 to 4 feet with very steep banks and portions of South Larson Creek were historically filled during the construction of North Phoenix Road and the residential subdivisions west of the project area. That is, the creek has become very narrow and provides minimal functions for storm water storage and desynchronization. Most woody vegetation is located only in the immediate vicinity of the creek due to historic land clearing activities resulting in limited functions for wildlife habitat, food chain support, and thermoregulation. Fish passage is also severely limited due to the presence of in-stream flashboard diversion structures that are used to contain irrigation flows from the MID and TID. Though degraded, Larson Creek does provide habitat for anadromous fish species and the removal of MID flows would only improve upon this function.

The MID canal is an artificial feature that was created from upland exclusively for the purpose of irrigation water deliveries. Vegetation and accumulated sediments are routinely removed for improved water flow, effectively eliminating any functions or values for fish and wildlife habitat, food chain support, thermoregulation, or nutrient removal. Further, the canal is intended to facilitate the delivery of water and provides very little functions for storm water storage and desynchronization.

To offset the minor impacts associated with the Stonegate Estates, Phase 1 project, the impact area would be restored and replanted with a variety of trees, shrubs, and herbs. The plantings would provide greater plant diversity than currently exists, while the trees and shrubs would provide increased forage, shelter and resting areas for small mammals, birds and related wildlife. A judgmental hydrogeomorphic (HGM)-based assessment is included on the following page that compares the function and value losses of the wetland impact area to the gains of the mitigation area.

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

Table 3. Summary of Hydrogeomorphic (HGM)-based Assessment (Judgmental Method) for the Functional Capacity of Impacted Waters for the Stonegate Estates, Phase 1 Residential Subdivision.

Function	Larson Creek (RFT)*	MID Canal (RFT)*	Comments
Water Storage and Delay	Low	Low	Water quickly flows through Larson Creek due to its incised nature and lack of historic flood plain. Similarly, the MID canal is designed for the efficient removal of water.
Sediment Stabilization & Phosphorus Retention	Moderate	None	Larson Creek is mostly vegetated, but lacks complex microtopography and water storage functions. The MID canal was artificially created from upland; ongoing maintenance removes vegetation and limits water storage functions of the canal.
Nitrogen Removal	Low	None	Larson Creek and the MID canal have limited water storage functions, lack abundance of woody debris, and lack complex microtopography.
Primary Production	Moderately Low	None	A variety of vascular plant forms are present very near Larson Creek; however, much of the surrounding land is used for agriculture. The MID canal lacks vegetation and was created from upland.
Thermoregulation	Moderate	None	Larson Creek is well shaded and has several feet of flowing water during winter months. The MID canal is used for irrigation deliveries and lacks vegetation cover.
Resident Fish Habitat Support	Low	None	Larson Creek and MID canal have very steep banks and poor water quality. The MID canal is used for irrigation deliveries and lacks vegetation cover. Larson Creek has perennial flow and some plant forms that provide shelter.
Anadromous Fish Habitat Support	Moderate	None	Larson Creek is vegetated, remains flooded for more than a few days, and has substrates suitable for spawning and feeding. Larson Creek and MID canal lack excellent water quality. Maintenance of MID canal disturbs substrates and removes vegetation.
Invertebrate Habitat Support	Moderate	None	Larson Creek has shallow water during summer months and a variety of plant forms are interspersed throughout the site providing shelter from currents and predators. Water quality is poor in Larson Creek and MID canal and both lack a large acreage of wetlands in the surrounding landscape. The artificially created MID canal lacks vegetation and shallow water during summer months.

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

Table 3. Summary of Hydrogeomorphic (HGM)-based Assessment (Judgmental Method) for the Functional Capacity of Impacted Waters for the Stonegate Estates, Phase 1 Residential Subdivision (cont.).

Amphibian and Turtle Habitat	Low	None	Larson Creek and MID canal lack gently sloping banks, extensive woody debris/underwater cover, fine-stemmed herbs, excellent water quality, and many adjacent wetlands. Many vegetation forms are well interspersed along Larson Creek, but basking sites are limited. Busy roads are close to Larson Creek and the MID canal and adjacent land cover has been disturbed through agricultural practices. The artificially created MID canal lacks vegetation and basking sites.
Breeding Waterbird Support	None	None	Larson Creek and MID canal lack functions for breeding waterbird support.
Wintering and Migratory Waterbird Support	None	None	Larson Creek and MID canal lack functions for wintering and migratory waterbird support.
Songbird Habitat Support	Low	None	Larson Creek and MID canal lack a large acreage of native habitat and are near busy roads and human activity. Larson Creek flows year-round has a variety of plants forms.
Support of Characteristic Vegetation	Moderately Low	None	Larson Creek has a variety of plant forms; however, much of the plant cover consists of non-native species. MID canal lacks vegetation. Larson Creek and MID canal lack microtopographic relief and springtime water levels dissipate rapidly. Larson Creek and MID canal are near busy roads and human activity. Surrounding watershed and buffer zones are predominantly disturbed agricultural land.

*HGM Classes: RFT=Riverine Flow-Through

4710 S.W. Kelly Avenue 1st Floor / Post Office Box 2100 / Portland, OR 97208-2100 / 503-274-2100 / Fax: 503-274-2101

WETLAND FILL APPLICATION

APPENDIX B

DSL Concurrence Letter: Wetland Delineation Report Tax Lots 1201, 2000, & 2600
July 17, 2001

Oregon
John A. Kitzhaber, M.D., Governor

Division of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 378-3805
FAX (503) 378-4844
http://statelands.dsl.state.or.us

July 17, 2001

Steve DeCarlow
DeCarlow Homes Inc.
814 E. Jackson St. Suite A
Medford, OR 97504

Re: Wetland Delineation Report for Larson Creek site, North Phoenix and Coal Mine Roads, Medford, Jackson County; T37S R1W Sec. 34 Tax Lots 1201, 2000, and 2600; Det. # 00-0548

Dear Mr. DeCarlow:

I have reviewed the wetland delineation report prepared by Terra Science for the project referenced above. Based on the information presented in the report, I concur with the wetland and waterway boundaries as mapped in Figure 6 of the report, with the exception of the canal. Based on information in the report that south Larson creek is fish-bearing, and no evidence that there are any fish-exclusion devices, the canal and both branches of Larson creek are subject to state jurisdiction up to the bankfull stage. These wetlands and waterways are subject to the permit requirements of the state Removal-Fill Law. A state permit is required for fill or excavation of 50 cubic yards or more in a wetland area or below the top of bank of a waterway.

This concurrence is for purposes of the state Removal-Fill Law only. Federal or local permit requirements may apply as well. The Army Corps of Engineers will review the report and make a determination of jurisdiction for purposes of the Clean Water Act at the time that a permit application is submitted. We recommend that you attach a copy of this concurrence letter to both copies of any subsequent joint permit application to speed application review.

In evaluating a permit application, our agency will first consider whether there is an analysis of alternatives that avoid or minimize wetland or waterway impacts. State law establishes a preference for avoidance of wetland impacts. Because measures to avoid and minimize wetland impacts may include reconfiguring parcel layout and size or development design, we recommend that you work with Division staff on appropriate site design before completing the city or county land use approval process. The permit coordinator for this site is Mike McCabe.

This concurrence is based on information provided to the agency. Should additional information be brought to our attention or should site conditions change, we would consider the new information and re-evaluate the site and our jurisdictional determination as needed. Thank you for your report. I apologize for the delay in responding.

Sincerely,

Dana Field
Wetlands Planner

Approved by _____
John E. Lilly
Assistant Director

cc: Justin Isle, Terra Science
City of Medford Planning Department
Jim Goudzwaard, Corps of Engineers
Mike McCabe, DSL

WETLAND FILL APPLICATION

APPENDIX C

U.S. Fish & Wildlife Service Results for Threatened and Endangered Species

ENCLOSURE A

FEDERALLY LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES, CANDIDATE SPECIES AND SPECIES OF CONCERN THAT MAY OCCUR WITHIN THE AREA OF THE PHOENIX/HARBROOKE/COAL MINE ROADS PROJECT
1-7-03-SP-0640

LISTED SPECIES[1/]

Birds		
Bald eagle[2/]	*Haliaeetus leucocephalus*	T
Fish		
Coho salmon (S. Oregon/N. Calif. Coast)[3/]	*Oncorhynchus kisutch*	**T
Invertebrates		
Vernal pool fairy shrimp	*Branchinecta lynchi*	T
Plants		
Gentner mission-bells[4/]	*Fritillaria gentneri*	E
Large-flowered wooly meadowfoam[5/]	*Limnanthes floccosa* ssp. *grandiflora*	E
Cook's lomatium[5/]	*Lomatium cookii*	E

PROPOSED SPECIES

None

CANDIDATE SPECIES[6/]

Birds	
Streaked horned lark	*Eremophila alpestris strigata*

SPECIES OF CONCERN

Mammals	
Pallid bat	*Antrozous pallidus pacificus*
Pacific western big-eared bat	*Corynorhinus (=Plecotus) townsendii townsendii*
Silver-haired bat	*Lasionycteris noctivagans*
Long-eared myotis (bat)	*Myotis evotis*
Fringed myotis (bat)	*Myotis thysanodes*
Long-legged myotis (bat)	*Myotis volans*
Yuma myotis (bat)	*Myotis yumanensis*
Birds	
Tricolored blackbird	*Agelaius tricolor*
Band-tailed pigeon	*Columba fasciata*
Olive-sided flycatcher	*Contopus cooperi (=borealis)*
Yellow-breasted chat	*Icteria virens*
Acorn woodpecker	*Melanerpes formicivorous*
Lewis' woodpecker	*Melanerpes lewis*
Mountain quail	*Oreortyx pictus*
Oregon vesper sparrow	*Pooecetes gramineus affinis*
Purple martin	*Progne subis*

Amphibians and Reptiles	
Northwestern pond turtle	*Emys (=Clemmys) marmorata marmorata*
Common kingsnake	*Lampropeltis getula*
California mountain kingsnake	*Lampropeltis zonata*
Siskiyou Mountains salamander	*Plethodon stormi*
Northern red-legged frog	*Rana aurora aurora*
Foothill yellow-legged frog	*Rana boylii*
Fish	
Pacific lamprey	*Lampetra tridentata*
Coastal cutthroat trout (S. OR/CA Coasts)	*Oncorhynchus clarki clarki*
Invertebrates	
Franklin's bumblebee	*Bombus franklini*
Siskiyou chloealtis grasshopper	*Chloealtis aspasma*
Schuh's homoplectran caddisfly	*Homoplectra schuhi*
Siskiyou gazelle beetle	*Nebria gebleri siskiyouensis*
Plants	
White meconella	*Meconella oregana*
Detling's microseris	*Microseris laciniata* ssp. *detlingii*
Coral seeded allocarya	*Plagiobothrys figuratus* ssp. *corallicarpus*

(E) - Listed Endangered *(T) - Listed Threatened* *(CH) - Critical Habitat has been designated for this species*
(PE) - Proposed Endangered *(PT) - Proposed Threatened* *(PCH) - Critical Habitat has been proposed for this species*
(S) - Suspected *(D) - Documented*

Species of Concern - Taxa whose conservation status is of concern to the Service (many previously known as Category 2 candidates), but for which further information is still needed.

** *Consultation with National Marine Fisheries Service may be required.*

[1] *U. S. Department of Interior, Fish and Wildlife Service, October 31, 2000, Endangered and Threatened Wildlife and Plants, 50 CFR 17.11 and 17.12*
[2] *Federal Register Vol. 60, No. 133, July 12, 1995 - Final Rule - Bald Eagle*
[3] *Federal Register Vol. 62, No. 87, May 6, 1997, Final Rule-Coho salmon*
[4] *Federal Register Vol. 64, No. 237, December 10 , 1999, Final Rule -Fritillaria gentneri*
[5] *Federal Register Vol. 67, No.216, November 7, 2002, Final Rule - Lomatium cookii and Limnanthes floccosa ssp. grandiflora*
[6] *Federal Register Vol. 67, No. 114, June 13, 2002, Notice of Review - Candidate or Proposed Animals and Plants*

ENCLOSURE B

FEDERAL AGENCIES RESPONSIBILITIES UNDER SECTION 7(a) and (c)
OF THE ENDANGERED SPECIES ACT

SECTION 7(a)-Consultation/Conference

Requires:

1) Federal agencies to utilize their authorities to carry out programs to conserve endangered and threatened species;

2) Consultation with FWS when a Federal action may affect a listed endangered or threatened species to insure that any action authorized, funded or carried out by a Federal agency is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of Critical Habitat. The process is initiated by the Federal agency after they have determined if their action may affect (adversely or beneficially) a listed species; and

3) Conference with FWS when a Federal action is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed Critical Habitat.

SECTION 7(c)-Biological Assessment for Major Construction Projects[1]

Requires Federal agencies or their designees to prepare a Biological Assessment (BA) for construction projects only. The purpose of the BA is to identify proposed and/or listed species which are/is likely to be affected by a construction project. The process is initiated by a Federal agency in requesting a list of proposed and listed threatened and endangered species (list attached). The BA should be completed within 180 days after its initiation (or within such a time period as is mutually agreeable). If the BA is not initiated within 90 days of receipt of the species list, the accuracy of the species list should be informally verified with our Service. No irreversible commitment of resources is to be made during the BA process which would foreclose reasonable and prudent alternatives to protect endangered species. Planning, design, and administrative actions may be taken; however, no construction may begin.

To complete the BA, your agency or its designee should: (1) conduct an on-site inspection of the area to be affected by the proposal which may include a detailed survey of the area to determine if the species is present and whether suitable habitat exists for either expanding the existing population or for potential reintroduction of the species; (2) review literature and scientific data to determine species distribution, habitat needs, and other biological requirements; (3) interview experts including those within FWS, National Marine Fisheries Service, State conservation departments, universities, and others who may have data not yet published in scientific literature; (4) review and analyze the effects of the proposal on the species in terms of individuals and populations, including consideration of cumulative effects of the proposal on the species and its habitat; (5) analyze alternative actions that may provide conservation measures and (6) prepare a report documenting the results, including a discussion of study methods used, any problems encountered, and other relevant information. The BA should conclude whether or not a listed species will be affected. Upon completion, the report should be forwarded to our Portland Office.

---

[1] A construction project (or other undertaking having similar physical impacts) which is a major Federal action significantly affecting the quality of the human environment as referred to in NEPA (42 U.S.C. 4332. (2)c). On projects other that construction, it is suggested that a biological evaluation similar to the biological assessment be undertaken to conserve species influenced by the Endangered Species Act.

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
☎ 503-378-3805

Permit No.:	31439-RF
Permit Type:	Removal/Fill
Waterway:	Wetland/Larson Creek
County:	Jackson
Expiration Date:	March 31, 2005
Corps No.:	NA

PACIFIC TREND BUILDING CO.

IS AUTHORIZED IN ACCORDANCE WITH ORS 196.800 TO 196.990 TO PERFORM THE OPERATIONS DESCRIBED IN THE ATTACHED COPY OF THE APPLICATION, SUBJECT TO THE SPECIAL CONDITIONS LISTED ON ATTACHMENT A AND TO THE FOLLOWING GENERAL CONDITIONS:

1. This permit does not authorize trespass on the lands of others. The permit holder shall obtain all necessary access permits or rights-of-way before entering lands owned by another.
2. This permit does not authorize any work that is not in compliance with local zoning or other local, state, or federal regulation pertaining to the operations authorized by this permit. The permit holder is responsible for obtaining the necessary approvals and permits before proceeding under this permit.
3. All work done under this permit must comply with Oregon Administrative Rules, Chapter 340; Standards of Quality for Public Waters of Oregon. Specific water quality provisions for this project are set forth on Attachment A.
4. Violations of the terms and conditions of this permit are subject to administrative and/or legal action which may result in revocation of the permit or damages. The permit holder is responsible for the activities of all contractors or other operators involved in work done at the site or under this permit.
5. A copy of the permit shall be available at the work site whenever operations authorized by the permit are being conducted.
6. Employees of the Department of State Lands and all duly authorized representatives of the Director shall be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this permit.
7. Any permit holder who objects to the conditions of this permit may request a hearing from the Director, in writing, within 10 days of the date this permit was issued.
8. In issuing this permit, the Department of State Lands makes no representation regarding the quality or adequacy of the permitted project design, materials, construction, or maintenance, except to approve the project's design and materials, as set forth in the permit application, as satisfying the resource protection, scenic, safety, recreation, and public access requirements of ORS Chapters 196, 390 and related administrative rules.
9. Permittee shall defend and hold harmless the State of Oregon, and its officers, agents, and employees from any claim, suit, or action for property damage or personal injury or death arising out of the design, material, construction, or maintenance of the permitted improvements.

NOTICE: If removal is from state-owned submerged and submersible land, the applicant must comply with leasing and royalty provisions of ORS 274.530. If the project involves creation of new lands by filling on state-owned submerged or submersible lands, you must comply with ORS 274.905 - 274.940. This permit does not relieve the permittee of an obligation to secure appropriate leases from the Department of State Lands, to conduct activities on state-owned submerged or submersible lands. Failure to comply with these requirements may result in civil or criminal liability. For more information about these requirements, please contact the Department of State Lands, 378-3805.

Lori Warner, Manager
Western Region Field Operations
Oregon Department of State Lands

Lori Warner
Authorized Signature

March 31, 2004
Date Issued

ATTACHMENT A

Permittee: Pacific Trend Building Company

Special Conditions for Removal/Fill Permit No. 31439-RF. PLEASE READ AND BECOME FAMILIAR WITH CONDITIONS OF YOUR PERMIT. This project may be site inspected by the Department of State Lands as part of our monitoring program. The Department has the right to stop or modify the project at any time if you are not in compliance with these conditions. A copy of this permit shall be available at the work site whenever authorized operations are being conducted.

1. This permit authorizes the placement of up to 120 cubic yards and removal of up to 120 cubic yards to install an irrigation siphon to convey MID irrigation water under Larson Creek, the construction of a stormwater outfall from Phase I of Stonegate Estates, and the removal of three flashboard diversion structures from North and South Larson Creeks along with the blockage of the abandoned portion of the MID canal that intersects North Larson Creek in T 37S, R 1W, Section 34BC, Tax Lot 2000 in Larson Creek and North Larson Creek, Jackson County, as outlined in the attached permit application, map and drawings, dated December 2003.

2. Fill and removal activities in Larson Creek and North Larson Creek shall be conducted between June 15 and September 15, unless otherwise coordinated with ODFW and approved in writing by ODSL.

3. Excavation for toe trenches or for the installation of the siphon shall be isolated from the wetted area of the waterway. This can be done with a dike, coffer dam or similar structure.

4. Sediment-laden or contaminated water pumped from the isolation area shall be filtered before it is allowed to reenter a waterway.

5. Any fish present within the isolation area must be salvaged prior to the start of work within the isolation area. Fish salvage operations should be coordinated with an ODFW fish biologist.

6. Passage for both adult and juvenile fish shall be provided throughout the project period.

7. TURBIDITY/EROSION CONTROLS. The authorized work shall not cause turbidity of affected waters to exceed 10% over natural background turbidity 100 feet downstream of the fill point. For projects proposed in areas with no discernible gradient break (gradient of 2% or less), monitoring shall take place at 4 hour intervals and the turbidity standard may be exceeded for a maximum of one monitoring intervals per 24 hour work period provided all

maximum of one monitoring intervals per 24 hour work period provided all practicable control measures have been implemented. This turbidity standard exceedance intervals applies only to coastal lowlands and floodplains, valley bottoms and other low-lying and/or relatively flat land.

For projects in all other areas, the turbidity standard can be exceeded for a maximum of 2 hours (limited duration) provided all practicable erosion control measures have been implemented. These projects may also be subject to additional reporting requirements.

Turbidity shall be monitored during active in-water work periods. Monitoring points shall be at an undisturbed site (representative background) 100 feet upstream from the turbidity causing activity (i.e., fill or discharge point), 100 feet downstream from the fill point, and at the point of fill. A turbidimeter is recommended, however, visual gauging is acceptable. Turbidity that is visible over background is considered an exceedance of the standard.

Practicable erosion control measures which shall be implemented, as appropriate, include but are not limited to the following:

a) Place fill in the water using methods that avoid disturbance to the maximum practicable extent (e.g. placing fill with a machine rather than end-dumping from a truck).
b) Prevent all construction materials and debris from entering waterway;
c) Use filter bags, sediment fences, sediment traps or catch basins, silt curtains, leave strips or berms, Jersey barriers, sand bags, or other measures sufficient to prevent movement of soil;
d) Use impervious materials to cover stockpiles when unattended or during rain event;
e) Erosion control measures shall be inspected and maintained daily to ensure their continued effectiveness;
f) No heavy machinery in a wetland or other waterway;
g) Use a gravel staging area and construction access;
h) Fence off planted areas to protect from disturbance and/or erosion; and
i) Flag or fence off wetlands adjacent to the construction area.

Erosion control measures shall be maintained as necessary to ensure their continued effectiveness, until soils become stabilized. All erosion control structures shall be removed when project is complete and soils are stabilized and vegetated.

8. HAZARDOUS, TOXIC AND WASTE MATERIALS. Petroleum products, chemicals, fresh cement sandblasted material and chipped paint or other deleterious waste materials shall not be allowed to enter waters of the state. No wood treated with leach able preservatives shall be placed in the

waterway. Machinery refueling is to occur off-site or in a confined designated area to prevent spillage into waters of the state. Project-related spills into water of the state or onto land with a potential to enter waters of the state shall be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311.

9. All exposed soils shall be stabilized during and after construction in order to prevent erosion and sedimentation.

10. If any archaeological resources and/or artifacts are uncovered during excavation, all construction activity shall immediately cease. The State Historic Preservation Office shall be contacted (phone: 503-378-4168).

11. The Department of State Lands retains the authority to temporarily halt or modify the project in case of unforeseen damage to natural resources.

March 31, 2004
J:\AttachmentAwestLAS\RF Removal Fill Permits\31439-RF.doc